

Tap/Drill Sizes

INCH TAP DRILL SIZES

Recommended tap drill sizes (for approx. 75% thread)

INCH SIZES - NATIONAL COARSE

<i>TAP SIZE</i>	<i>DRILL SIZE</i>
#1-64	#53
#2-56	#51
#3-48	5/64"
#4-40	#43
#5-40	#39
#6-32	#36
#8-32	#29
#10-24	#25
#12-24	#17
1/4-20	#7
5/16-18	F
3/8-16	5/16
7/16-14	U
1/2-13	27/64
9/16-12	31/64
5/8-11	17/32
3/4-10	21/32
7/8-9	49/64
1"-8	7/8
1-1/8-7	63/64
1-1/4-7	1-7/64
1-1/2-6	1-11/32
1-3/4-5	1-35/64
2"-4-1/2	1-25/32

INCH SIZES - NATIONAL FINE

<i>TAP SIZE</i>	<i>DRILL SIZE</i>
#0-80	3/64"
#1-72	#53
#2-64	#50
#3-56	#46
#4-48	#42
#5-44	#37
#6-40	#33
#8-36	#29
#10-32	#21
#12-28	#15
1/4-28	#3
5/16-24	I
3/8-24	Q
7/16-20	W
1/2-20	29/64
9/16-18	33/64
5/8-18	37/64
3/4-16	11/16
7/8-14	13/16
1"-14	15/16
1-1/8-12	1-3/64
1-1/4-12	1-11/64
1-1/2-12	1-27/64
1-3/4-12	1-43/64
2"-12	1-59/64

TAPER PIPE SIZES - NPT

<i>TAP SIZE</i>	<i>DRILL SIZE</i>
1/8-27	R
1/4-18	7/16
3/8-18	37/64
1/2-14	23/32
3/4-14	59/64
1"-11-1/2	1-5/32
1-1/4-11-1/2	1-1/2
1-1/2-11-1/2	1-47/64
2"-11-1/2	2-7/32
2-1/2-8	2-5/8
3"-8	3-1/4
3-1/2-8	3-3/4
4"-8	4-1/4

STRAIGHT PIPE SIZES - NPS

<i>TAP SIZE</i>	<i>DRILL SIZE</i>
1/8-27	S
1/4-18	29/64
3/8-18	19/32
1/2-14	47/64
3/4-14	15/16
1"-11-1/2	1-3/16
1-1/4-11-1/2	1-33/64
1-1/2-11-1/2	1-3/4
2"-11-1/2	2-7/32
2-1/2-8	2-21/32
3"-8	3-9/32
3-1/2-8	3-25/32
4"-8	4-9/32

METRIC TAP DRILL SIZES

Recommended tap drill sizes (for approx. 75% thread)

METRIC COARSE SIZES

<i>TAP SIZE</i>	<i>DRILL SIZE</i>
1mm x .25	.75mm
1.1 x .25	.85
1.2 x .25	.95
1.4 x .3	1.1
1.6 x .35	1.25
1.7 x .35	1.3
1.8 x .35	1.45
2 x .4	1.6
2.2 x .45	1.75
2.5 x .45	2.05
3 x .5	2.5
3.5 x .6	2.9
4 x .7	3.3
4.5 x .75	3.7
5 x .8	4.2
6 x 1	5
7 x 1	6
8 x 1.25	6.8
9 x 1.25	7.8
10 x 1.5	8.5
11 x 1.5	9.5
12 x 1.75	10.2
14 x 2	12
16 x 2	14
18 x 2.5	15.5
20 x 2.5	17.5
22 x 2.5	19.5
24 x 3	21
27 x 3	24
30 x 3.5	26.5
33 x 3.5	29.5
36 x 4	32
39 x 4	35

METRIC FINE SIZES

<i>TAP SIZE</i>	<i>DRILL SIZE</i>
4 mm x .35	3.6mm
4 x .5	3.5
5 x .5	4.5
6 x .5	5.5
6 x .75	5.25
7 x .75	6.25
8 x .5	7
8 x .75	7.25
8 x 1	7.5
9 x 1	8
10 x .75	9.25
10 x 1	9
10 x 1.25	8.8
11 x 1	10
12 x .75	11.25
12 x 1	11
12 x 1.5	10.5
14 x 1	13
14 x 1.25	12.8
14 x 1.5	12.5
16 x 1	15
16 x 1.5	14.5
18 x 1	17
18 x 2	16
20 x 1	19
20 x 1.5	18.5
20 x 2	18
22 x 1	21
22 x 1.5	20.5
22 x 2	20
24 x 1.5	22.5
24 x 2	22
26 x 1.5	24.5
27 x 1.5	25.5
27 x 2	25
28 x 1.5	26.5
30 x 1.5	28.5
30 x 2	28
33 x 2	31
36 x 3	33
39 x 3	36

Newman Tool's handy hint.

For Metric sizes only. Diameter of thread minus the pitch equals the tap drill size, and you thought metric was difficult ;-)

eg. M6 x 1
6 - 1 = 5mm

<http://www.newmantools.com/tapdrill.htm>